CONCLUSION

If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5875.

Respectfully submitted,

Leticia R. Block

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Reg. No.: 50,167

Date: _02-19-03_

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Figure 1

Sequence Name:

GW.S.ctg16335-000003.31.0

Figure 1A

```
LLAPTGSLFRNCTQDGWSETFPRPNLACGVNVNDSSNEKRSYLLKLKVMYTVGYSSSLVM
LLVALGILCAFRRLHCTRNYIHMHLFVSFILRALSNFIKDAVLFSSDDVTYCDAHRGCKL
VMVLFXYCIMANYSWLLVEGSTFTHxLAISFFSERKYLQGFVAFGWGSPAIFVALWAIAR
HFLEDVGCWDINANASIWWIIRGPVILSILNFILFINILRILMRKLRTQETRGNEVSHYK
RLARSTLLLIPLFGIHYIVFAFSPEDAMEIQLFF
```

Figure 1B

```
CTCTTGGCACCCACAGGTTCCTTGTTCCGAAACTGCACACAGGATGGCTGGTCAGAAACC
TTCCCCAGGCCTAATCTGGCCTGTGGCGTTAATGTGAACGACTCTTCCAACGAGAAGCGG
CACTCCTACCTGCTGAAGCTGAAAGTCATGTACACCGTGGGCTACAGCTCCTCCCTGGTC
ATGCTCCTGGTCGCCCTTGGCATCCTCTGTGCTTTCCGGAGGCTCCACTGCACTCGCAAC
TACATCCACATGCACCTGTTCGTGTCCTTCATCCTTCGTGCCCTGTCCAACTTCATCAAG
GACGCCGTGCTCTTCTCCTCAGATGATGTCACCTACTGCGATGCCCACAGGGCGGGCTGC
AAGCTGGTCATGGTGCTGTTC
```

Figure 1C

```
TACTGCATCATGGCCAACTACTCCTGGCTGCTGGTGGAAGGCTCTACCTTCACACATNTC
CTCGCCATCTCCTTCTTCTCTGAAAGAAAGTACCTCCAGGGATTTGTGGCATTCGGATGG
GGTTCTCCAGCCATTTTTGTTGCTTTGTGGGCTATTGCCAGACACTTTCTGGAAGATGTT
GGGTGCTGGGACATCAATGCCAACGCATCCATCTGGTGGATCATTCGTGGTCCTGTGATC
CTCTCCATCCTGATTAATTTCATCCTTTTCATAAACATTCTAAGAATCCTGATGAGAAAA
CTTAGAACCCAAGAAACAAGAGGAAATGAAGTCAGCCATTATAAGCGCCTGGCCAGGTCC
ACTCTCCTGCTGATCCCCCTCTTTGGCATCCACTACATCGTCTTCGCCTTCTCCCCAGAG
GACGCTATGGAGATCCAGCTGTTTTTT
```

Figure 1D

```
CTCTTGGCACCCACAGGTTCCTTGTTCCGAAACTGCACACAGGATGGCTGGTCAGAAACC
TTCCCCAGGCCTAATCTGGCCTGTGGCGTTAATGTGAACGACTCTTCCAACGAGAAGCGG
CACTCCTACCTGCTGAAGCTGAAAGTCATGTACACCGTGGGCTACAGCTCCTCCCTGGTC
ATGCTCCTGGTCGCCCTTGGCATCCTCTGTGCTTTCCGGAGGCTCCACTGCACTCGCAAC
TACATCCACATGCACCTGTTCGTGTCCTTCATCCTTCGTGCCCTGTCCAACTTCATCAAG
GACGCCGTGCTCTTCTCCTCAGATGATGTCACCTACTGCGATGCCCACAGGGCGGGCTGC
AAGCTGGTCATGGTGCTGTTC
TACTGCATCATGGCCAACTACTCCTGGCTGCTGGTGGAAGGCTCTACCTTCACACATNTC
CTCGCCATCTCCTTCTTCTCTGAAAGAAAGTACCTCCAGGGATTTGTGGCATTCGGATGG
GGTTCTCCAGCCATTTTTGTTGCTTTGTGGGCTATTGCCAGACACTTTCTGGAAGATGTT
GGGTGCTGGGACATCAATGCCAACGCATCCATCTGGTGGATCATTCGTGGTCCTGTGATC
CTCTCCATCCTGATTAATTTCATCCTTTTCATAAACATTCTAAGAATCCTGATGAGAAAA
CTTAGAACCCAAGAAACAAGAGGAAATGAAGTCAGCCATTATAAGCGCCTGGCCAGGTCC
ACTCTCCTGCTGATCCCCCTCTTTGGCATCCACTACATCGTCTTCGCCTTCTCCCCAGAG
GACGCTATGGAGATCCAGCTGTTTTTT
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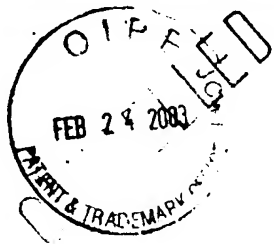
Figure 2

Sequence Name:

GW.S.ctg16490-000000.17.0

Figure 2A

PTFILFSFQPGDKRTKHICVYWEGSEGGHWSTEGCSHVHSNGSYTKCKCFHLSSFAVLVA
LAPKDPVLTVITQVGLTISLLCLFLAILTFLLCRPIQNTSTSLHLELSLCLFLAHLLFLT
GINRTEPELCSIIAGLLHFLYLACFTWMLLEGLHLFLTVRNLKVANYTSTGRFKKRFMYP
VGYGIPAVIIAVSAIVGPQNYGTFTHCWLKLDKGFIWSFMGPVAVIILNLVFYFQVLWIL
RSKLSSLNKEVSTIQDTRVMTFKAISQLFILGCSWGLGFFMVEEVGKTIGSIIAYSFTII
NTLQGVLLFVVHCLLNRQVR

Figure 2B

CCCACTTTCATACTATTCTCTTTCCAGCCTGGTGACAAGAGAACAAAACATATCTGTGTC
TACTGGGAGGGATCAGAGGGAGGCCACTGGTCCACGGAGGGCTGCTCTCATGTGCACAGC
AACGGTTCTTACACCAAATGCAAGTGCTTCCATCTGTCCAGCTTTGCCGTCCTCGTGGCT
CTTGCCCCCAAGGAGGACCCTGTGCTGACCGTGATCACCCAGGTGGGGCTGACCATCTCT
CTGCTGTGCCTCTTCCTGGCCATCCTCACCTTCCTCCTGTGCCGGCCCATCCAGAACACC
AGCACCTCCCTCCATCTAGAGCTCTCCCTCTGCCTCTTCCTGGCCCACCTCCTGTTCCTG
ACGGGCATCAACAGAACTGAGCCTGAGGTGCTGTGCTCCATCATTGCAGGGCTGCTGCAC
TTCCTCTACCTGGCTTGCTTCACCTGGATGCTCCTGGAAGGGCTGCACCTCTTCCTCACC
GTCAGGAACCTCAAGGTGGCCAACTACACCAGCACGGGCAGATTCAAGAAGAGGTTCATG
TACCCTGTAGGCTACGGGATCCCAGCTGTGATTATTGCTGTGTCAGCAATAGTTGGACCC
CAGAATTATGGAACATTTACTCACTGTTGGCTCAAGCTTGATAAAGGATTCATCTGGAGC
TTCATGGGGCCAGTAGCAGTCATTATCTTGATAAACCTGGTGTTCTACTTCCAAGTTCTG
TGGATTTTGAGAAGCAAACTTTCCTCCCTCAATAAAGAAGTTTCCACCATTCAGGACACC
AGAGTCATGACATTTAAAGCCATTTCTCAGCTATTTATCCTGGGCTGTTCTTGGGGCCTT
GGTTTTTTTATGGTTGAAGAAGTAGGGAAGACGATTGGATCAATCATTGCATACTCATTC
ACCATCATCAACACCCTTCAGGGAGTGTTGCTCTTTGTGGTACACTGTCTCCTTAATCGC
CAGGTAAGG

Figure 3

Sequence Name:

GW.S.ctg13100-000000.33.0

Figure 3A

QHSDAVHDLLLDVITWVGILLSLVCLLICIFTFCFFRGLQSDRNTIHKNLCISLFVAELL
FLIGINRTDQPACAVFAALLHFFFLAAFTWMFLEGVQLYIMLVEVFESEHSRRKYFYLVG
YGMPALIVAVSAAVDYRSYGTDKVCWLRLDTYFIWSFIGPATLIIMNVIFLGIALYKMFH
HTAILKPESGCLDNIKLKINIPIIKSIYIYMYICMCV

Figure 3B

CAGCACAGTGATGCGGTCCATGACCTCCTTCTGGATGTGATCACGTGGGTTGGAATTTTG
CTGTCCCTTGTTTGTCTCCTGATTTGCATCTTCACATTTTGCTTTTTCCGGGGGCTCCAG
AGTGACCGTAACACCATCCACAAGAACCTCTGCATCAGTCTCTTTGTAGCAGAGCTGCTC
TTCCTGATTGGGATCAACCGAACTGACCAACCAATTGCCTGTGCTGTTTTCGCTGCCCTG
TTACATTTCTTCTTCTTGGCTGCCTTCACCTGGATGTTCCTGGAGGGGGTGCAGCTTTAT
ATCATGCTGGTGGAGGTTTTTGAGAGTGAACATTCACGTAGGAAATACTTTTATCTGGTC
GGCTATGGGATGCCTGCACTCATTGTGGCTGTGTCAGCTGCAGTAGACTACAGGAGTTAT
GGAACAGATAAAGTATGTTGGCTCCGACTTGACACCTACTTCATTTGGAGTTTTATAGGA
CCAGCAACTTTGATAATTATGCTTAATGTAATCTTCCTTGGGATTGCTTTATATAAAATG
TTTCATCATACTGCTATACTGAAACCTGAATCAGGCTGTCTTGATAACATCAAGTTAAAA
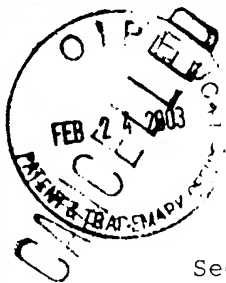ATTAATATTCCAATTATAAAATCTATTTATATCTATATGTATATATGCATGTGTGTG

Figure 4

Sequence Name:

GW.A.ctg12444-000001.0.2

Figure 4A

```
GNVAVAFVYYKSIGPLLSSSDNFLLKPQNYDNSEEEERVISSVISVSMSSNPPTLYELEK
ITFTLSHRKTDRYRSLCAFWNYSPDTMNGSWSSEGCELTYSNETHTSCRCNHLTHFAILM
SSGPSIIKDYNILTRITQLGIIISLICLAICIFTFWFFSEIQSTRTTIHKNLCCSLFLAE
LVFLVGINTNTNKFCSIIAGLLHYFFLAAFAWMCIEGIHLYLIVVGVIYNKGFLHKNFYI
FGYLSPAVVVGFSAALGYRYYGTTKVCWLSTENNFIWSFIGPACLIILVCIYKIVITIQK
SDDH
```

Figure 4B

```
GGCAATGTTGCAGTTGCATTTGTATATTATAAGAGTATTGGTCCTTTGCTTTCATCATCT
GACAACTTCTTATTGAAACCTCAAAATTATGATAATTCTGAAGAGGAGGAAAGAGTCATA
TCTTCAGTAATTTCAGTCTCAATGAGCTCAAACCCACCCACATTATATGAACTTGAAAAA
ATAACATTTACATTAAGTCATCGAAAGGTCACAGATAGGTATAGGAGTCTATGTGCATTT
TGGAATTACTCACCTGATACCATGAATGGCAGCTGGTCTTCAGAGGGCTGTGAGCTGACA
TACTCAAATGAGACCCACACCTCATGCCGCTGTAATCACCTGACACATTTTGCAATTTTG
ATGTCCTCTGGTCCTTCCATTGGTATTAAAGATTATAATATTCTTACAAGGATCACTCAA
CTAGGAATAATTATTTCACTGATTTGTCTTGCCATATGCATTTTTACCTTCTGGTTCTTC
AGTGAAATTCAAAGCACCAGGACAACAATTCACAAAAATCTTTGCTGTAGCCTATTTCTT
GCTGAACTTGTTTTTCTTGTTGGGATCAATACAAATACTAATAAGCTCTTCTGTTCAATC
ATTGCCGGACTGCTACACTACTTCTTTTTAGCTGCTTTTGCATGGATGTGCATTGAAGGC
ATACATCTCTATCTCATTGTTGTGGGTGTCATCTACAACAAGGGATTTTTGCACAAGAAT
TTTTATATCTTTGGCTATCTAAGCCCAGCCGTGGTAGTTGGATTTTCGGCAGCACTAGGA
TACAGATATTATGGCACAACCAAAGTATGTTGGCTTAGCACCGAAAACAACTTTATTTGG
AGTTTTATAGGACCAGCATGCCTAATCATTCTTGTATGTATATATAAAATTGTTATTACA
ATTCAAAAAAGTGATGATCAT
```

Figure 5

Sequence Name:

GW.S.ctg12789-000004.100.0

Figure 5A

GAWATTGCSVAALYLDSTACFCNHSTSFAILLQIYEVQGPEEESLLRTLSFVGCGVSFCA
LTTTFLLFLVAGVPKSERTTVHKNLTFSLASAEGFLMTSEWAKANEACVAVTVAMHFLFL
VAFSWMLVEGLLLWRKVVAVSMHPGPGMRLYHATGWGVPVGIVAVTLAMLPHDYVAPGHC
WLNVHTNAIWAFVGPVLFVLTVS

Figure 5B

GGTGCCTGGGCCACCACAGGCTGCTCCGTGGCTGCCCTGTACCTGGACTCCACCGCCTGC
TTCTGCAACCACAGCACCAGCTTTGCCATCCTGCTGCAAATCTATGAAGTACAGAGAGGC
CCTGAGGAGGAGTCGCTGCTGAGGACTCTGTCATTTGTGGGCTGTGGCGTGTCCTTCTGC
GCCCTCACCACCACCTTCTTGCTCTTCCTGGTGGCCGGGGTCCCCAAGTCAGAGCGAACC
ACAGTCCACAAGAACCTCACCTTCTCCCTGGCCTCTGCCGAGGGCTTCCTCATGACCAGC
GAGTGGGCCAAGGCCAATGAGGTGGCATGTGTGGCTGTCACAGTCGCAATGCACTTCCTC
TTTCTGGTGGCATTCTCCTGGATGCTGGTGGAGGGGCTGCTGCTGTGGAGGAAGGTGGTA
GCTGTGAGCATGCACCCGGGCCCAGGCATGCGGCTCTACCACGCCACAGGCTGGGGCGTG
CCTGTGGGCATCGTGGCGGTCACCCTGGCCATGCTCCCCCATGACTACGTGGCCCCCGGA
CATTGCTGGCTCAATGTGCACACAAATGCCATCTGGGCCTTCGTGGGGCCTGTGCTCTTC
GTGCTGACTGTGAGC

Figure 6

Sequence Name:

GW.A.ctg12776-000000.33.0

Figure 6A

MKSPRRTTLCLMFIVIYSSKAALNWNYESTIHPLLHEHEPAGEEALRQKRAVATKSPTAE
EYTVNIEISFENASFLDPIKAYLNSLSFPIHGNNTDQITDILSINVTTVCRPAGNEIWCS
CETGYGWPRERCLHNLICQERDVFLPGHHCSCLKELPPNGPFCLLQEDVTLNMRVRLNVG
FQEDLMNTSSALYRSYKTDLETARKGYGILPGFKGVTVTGFKSGSVVVTYEVKTTPPSLE
LIHKANEQVVQSLNQTYKMDYNSFQAVTINESNFFVTPEIIFEGDTVSLVCEKEVLSSNV
SWRYEEQQLEIQNSSRFSIYTALFNNMTSVSKLTIHNITPGDAGEYVCKLILDIFEYECK
KKIDVMPIQILANEEMKVMCDNNPVSLNCCSQGNVNWSKVEWKQEGKINIPGTPETDIDS
SCSRYTLKADGTQCPSGSSGTTVIYTCEFISAYGARGSANIKVTFISVANLTITPDPISV
SEGQNFSIKCISDVSNYDEVYWNTSAGIKIYQRFYTTRRYLDGAESVLTVKTSTREWNGT
YHCIFRYKNSYSIATKDVIVHPLPLKLNIMVDPLEATVSCSGSHHIKCCIEEDGDYKVTF
HTGSSSLFAAKEVNKKQVCYKHNFNASSVSWCSKTVDVCCHFTNAANNSVWSPSMKLNLV
PGENITCQDPVIGVGEPGKVIQKLCRFSNVPSSPESPIGGTITYKCVGSQWEEKRNDCIS
APINSLLQMAKLIKSPSQDEMLPTYLKDLSISIDKAEHEISSSPGSLGAIINILDLLSTV
PTQVNSEMMTVLSTVNVILGKPVLNTWKVLQQQWTNQSSQLLHSVERFSQALQSGDSPPL
SFSQTNVQMSSMVIKSSHPETYQQRFVFPYFDLWGNVVIDKSYLENLQSDSSIVTMAFPT
LQAILAQDIQENNFAESLVMTTTVSHNTTMPFRISMTFKNNSPSGGETKCVFWNFRLANN
TGGWDSSGCYVEEGDGDNVTCICDHLTSFSILMSPDSPDPSSLLGILLDIISYVGVGFSI
LSLAACLVVEAVVWKSVTKNRTSYMRHTCIVNIAASLLVANTWFIVVAAIQDNRYILCKT
ACVAATFFIHFFYLSVFFWMLTLGLMLFYRLVFILHETSRSTQKAIAFCLGYGCPLAISV
ITLGATQPREVYTRKNVCWLNWEDTKALLAFAIPALIIVVVNITITIVVITKILRPSIGD
KPCKQEKSSLFQISKSIGVLTPLLGLTWGFGLTTVFPGTNLVFHIIFAILNVFQLFILLF
GCLWDLKQEALLNKFSLSRWSSQHSKTSLGSSTPVFSMSSPISRRFNNLFGKTGTYNVST
PEATSSSLENSSSASSLLN

Figure 6B

ATGAAATCCCCAAGGAGAACCACTTTGTGCCTCATGTTTATTGTGATTTATTCTTCCAAA
GCTGCACTGAACTGGAATTACGAGTCTACTATTCATCCTTTGAGTCTTCATGAACATGAA
CCAGCTGGTGAAGAGGCACTGAGGCAAAAACGAGCCGTTGCCACAAAAAGTCCTACGGCT
GAAGAATACACTGTTAATATTGAGATCAGTTTTGAAAATGCATCCTTCCTGGATCCTATC
AAAGCCTACTTGAACAGCCTCAGTTTTCCAATTCATGGGAATAACACTGACCAAATTACC
GACATTTTGAGCATAAATGTGACAACAGTCTGCAGACCTGCTGGAAATGAAATCTGGTGC
TCCTGCGAGACAGGTTATGGGTGGCCTCGGGAAAGGTGTCTTCACAATCTCATTTGTCAA
GAGCGTGACGTCTTCCTCCCAGGGCACCATTGCAGTTGCCTTAAAGAACTGCCTCCCAAT
GGACCTTTTTGCCTGCTTCAGGAAGATGTTACCCTGAACATGAGAGTCAGACTAAATGTA
GGCTTTCAAGAAGACCTCATGAACACTTCCTCCGCCCTCTATAGGTCCTACAAGACCGAC
TTGGAAACAGCGTTCCGGAAGGGTTACGGAATTTTACCAGGCTTCAAGGGCGTGACTGTG
ACAGGGTTCAAGTCTGGAAGTGTGGTTGTGACATATGAAGTCAAGACTACACCACCATCA
CTTGAGTTAATACATAAAGCCAATGAACAAGTTGTACAGAGCCTCAATCAGACCTACAAA
ATGGACTACAACTCCTTTCAAGCAGTTACTATCAATGAAAGCAATTTCTTTGTCACACCA
GAAATCATCTTTGAAGGGGACACAGTCAGTCTGGTGTGTGAAAAGGAAGTTTTGTCCTCC
AATGTGTCTTGGCGCTATGAAGAACAGCAGTTGGAAATCCAGAACAGCAGCAGATTCTCG
ATTTACACCGCACTTTTCAACAACATGACTTCGGTGTCCAAGCTCACCATCCACAACATC
ACTCCAGGTGATGCAGGTGAATATGTTTGCAAACTGATATTAGACATTTTTGAATATGAG
TGCAAGAAGAAAATAGATGTTATGCCCATCCAAATTTTGGCAAATGAAGAAATGAAGGTG
ATGTGCGACAACAATCCTGTATCTTTGAACTGCTGCAGTCAGGGTAATGTTAATTGGAGC
AAAGTAGAATGGAAGCAGGAAGGAAAAATAAATATTCCAGGAACCCCTGAGACAGACATA
GATTCTAGCTGCAGCAGATACACCCTCAAGGCTGATGGAACCCAGTGCCCAAGCGGGTCG

```
TCTGGAACAACAGTCATCTACACTTGTGAGTTCATCAGTGCCTATGGAGCCAGAGGCAGT
GCAAACATAAAAGTGACATTCATCTCTGTGGCCAATCTAACAATAACCCCGGACCCAATT
TCTGTTTCTGAGGGACAAAACTTTTCTATAAAATGCATCAGTGATGTGAGTAACTATGAT
GAGGTTTATTGGAACACTTCTGCTGGAATTAAAATATACCAAAGATTTTATACCACGAGG
AGGTATCTTGATGGAGCAGAATCAGTACTGACAGTCAAGACCTCGACCAGGGAGTGGAAT
GGAACCTATCACTGCATATTTAGATATAAGAATTCATACAGTATTGCAACCAAAGACGTC
ATTGTTCACCCGCTGCCTCTAAAGCTGAACATCATGGTTGATCCTTTGGAAGCTACTGTT
TCATGCAGTGGTTCCCATCACATCAAGTGCTGCATAGAGGAGGATGGAGACTACAAAGTT
ACTTTCCATACGGGTTCCTCATCCCTTCCTGCTGCAAAAGAAGTTAACAAAAAACAAGTG
TGCTACAAACACAATTTCAATGCAAGCTCAGTTTCCTGGTGTTCAAAAACTGTTGATGTG
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AAAGTCATCCAGAAGCTATGCCGGTTCTCAAACGTTCCCAGCAGCCCTGAGAGTCCCATT
GGCGGGACCATCACTTACAAATGTGTAGGCTCCCAGTGGGAGGAGAAGAGAAATGACTGC
ATCTCTGCCCCAATAAACAGTCTGCTCCAGATGGCTAAGGCTTTGATCAAGAGCCCCTCT
CAGGATGAGATGCTCCCTACATACCTGAAGGATCTTTCTATTAGCATAGACAAAGCGGAA
CATGAAATCAGCTCTTCTCCTGGGAGTCTGGGAGCCATTATTAACATCCTTGATCTGCTC
TCAACAGTTCCAACCCAAGTAAATTCAGAAATGATGACGCACGTGCTCTCTACGGTTAAT
GTCATCCTTGGCAAGCCCGTCTTGAACACCTGGAAGGTTTTACAACAGCAATGGACCAAT
CAGAGTTCACAGCTACTACATTCAGTGGAAAGATTTTCCCAAGCATTACAGTCGGGAGAT
AGCCCTCCTTTGTCCTTCTCCCAAACTAATGTGCAGATGAGCAGCATGGTAATCAAGTCC
AGCCACCCAGAAACCTATCAACAGAGGTTTGTTTTCCCATACTTTGACCTCTGGGGCAAT
GTGGTCATTGACAAGAGCTATCTAGAAAACTTGCAGTCGGATTCGTCTATTGTCACCATG
GCTTTCCCAACTCTCCAAGCCATCCTTGCCCAGGATATCCAGGAAAATAACTTTGCAGAG
AGCTTAGTGATGACAACCACTGTCAGCCACAATACAACTATGCCATTCAGGATTTCAATG
ACTTTTAAGAACAATAGCCCTTCAGGCGGCGAAACGAAGTGTGTCTTCTGGAACTTCAGG
CTTGCCAACAACACAGGGGGGTGGGACAGCAGTGGGTGCTATGTAGAAGAAGGTGATGGG
GACAATGTCACCTGTATCTGTGACCACCTAACATCATTCTCCATCCTCATGTCCCCTGAC
TCCCCAGATCCTAGTTCTCTCCTGGGAATACTCCTGGATATTATTTCTTATGTTGGGGTG
GGCTTTTCCATCTTGAGCTTGGCAGCCTGTCTAGTTGTGGAAGCTGTGGTGTGGAAATCG
GTGACCAAGAACCGGACTTCTTATATGCGCCACACCTGCATAGTGAATATCGCTGCCTCC
CTTCTGGTCGCCAACACCTGGTTCATTGTGGTCGCTGCCATCCAGGACAATCGCTACATA
CTCTGCAAGACAGCCTGTGTGGCTGCCACCTTCTTCATCCACTTCTTCTACCTCAGCGTC
TTCTTCTGGATGCTGACACTGGGCCTCATGCTGTTCTATCGCCTGGTTTTCATTCTGCAT
GAAACAAGCAGGTCCACTCAGAAAGCCATTGCCTTCTGTCTTGGCTATGGCTGCCCACTT
GCCATCTCGGTCATCACGCTGGGAGCCACCCAGCCCCGGGAAGTCTATACGAGGAAGAAT
GTCTGTTGGCTCAACTGGGAGGACACCAAGGCCCTGCTGGCTTTCGCCATCCCAGCACTG
ATCATTGTGGTGGTGAACATAACCATCACTATTGTGGTCATCACCAAGATCCTGAGGCCT
TCCATTGGAGACAAGCCATGCAAGCAGGAGAAGAGCAGCCTGTTTCAGATCAGCAAGAGC
ATTGGGGTCCTCACACCACTCTTGGGCCTCACTTGGGGTTTTGGTCTCACCACTGTGTTC
CCAGGGACCAACCTTGTGTTCCATATCATATTTGCCATCCTCAATGTCTTCCAGGGATTA
TTCATTTTACTCTTTGGATGCCTCTGGGATCTGAAGGTACAGGAAGCTTTGCTGAATAAG
TTTTCATTGTCGAGATGGTCTTCACAGCACTCAAAGTCAACATCCCTGGGTTCATCCACA
CCTGTGTTTTCTATGAGTTCTCCAATATCAAGGAGATTTAACAATTTGTTTGGTAAAACA
GGAACGTATAATGTTTCCACCCCAGAAGCAACCAGCTCATCCCTGGAAAACTCATCCAGT
GCTTCTTCGTTGCTCAAC
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Figure 7

Sequence Name:

GW.S.ctg12776-000000.175.0

Figure 7A

```
ILNSKSISNWTFIRDRNSSYILLHSVNSFARRLFIDNIPVDISDVFIHTMGTTISGDNIG
KNFTFSMRINDTSNEVTGRVLISRDELRKVPSPSQVISIAFPTIGAILEASLLENVTVNG
LVLSAILPKELKRISLIFEKISKSEERRTQCVGWHSVENRWDQQACKMIQENSQQAVCKC
RPSKLFTSFSILMSPHILESLILTYITYVGLGISICSLILCLSIEVLVWSQVTKTEITYL
RHVCIVNIAATLLMADVWFIVASFLSGPITHHKGCVAATFFVHFFYLSVFFWMLAKALLI
LYGIMIVFHTLPKSVLVASLFSVGYGCPLAIAAITVAATEPGKGYLRPEICWLNWDMTKA
LLAFVIPALAIVVVNLITVTLVIVKTQRAAIGNSMFQEVRAIVRISKNIAILTPLLGLTW
GFGVATVIDDRSLAFHIIFSLLNAFQFFILVFGTILDPKV
```

Figure 7B

```
ATTCTTAACAGCAAAAGCATCTCCAACTGGACTTTCATTCGTGACAGAAACAGCAGCTAT
ATCCTGCTACATTCAGTCAACTCCTTTGCAAGAAGGCTATTCATAGATAACATCCCTGTT
GACATATCAGATGTCTTCATTCATACTATGGGCACCACCATATCTGGAGATAACATTGGA
AAAAATTTCACTTTTTCTATGAGAATTAATGACACCAGCAATGAAGTCACTGGGAGAGTG
TTGATCAGCAGAGATGAACTTCGGAAGGTGCCTTCCCCTTCTCAGGTCATCAGCATTGCA
TTTCCAACTATTGGGGCTATTTTGGAAGCCAGTCTTTTGGAAAATGTTACTGTAAATGGG
CTTGTCCTGTCTGCCATTTTGCCCAAGGAACTTAAAAGAATCTCACTGATTTTTGAAAAG
ATCAGCAAGTCAGAGGAGAGGAGGACACAGTGTGTTGGCTGGCACTCTGTGGAGAACAGA
TGGGACCAGCAGGCCTGCAAAATGATTCAAGAAAACTCCCAGCAAGCTGTTTGCAAATGT
AGGCCAAGCAAATTGTTTACCTCTTTCTCAATTCTTATGTCACCTCACATCTTAGAGAGT
CTGATTCTGACTTACATCACATATGTAGGCCTGGGCATTTCTATTTGCAGCCTGATCCTT
TGCTTGTCCATTGAGGTCCTAGTCTGGAGCCAAGTGACAAAGACAGAGATCACCTATTTA
CGCCATGTGTGCATTGTTAACATTGCAGCCACTTTGCTGATGGCAGATGTGTGGTTCATT
GTGGCTTCCTTTCTTAGTGGCCCAATAACACACCACAAGGGATGTGTGGCAGCCACATTT
TTTGTTCATTTCTTTTACCTTTCTGTATTTTTCTGGATGCTTGCCAAGGCACTCCTTATC
CTCTATGGAATCATGATTGTTTTCCATACCTTGCCCAAGTCAGTCCTGGTGGCATCTCTG
TTTTCAGTGGGCTATGGATGCCCTTTGGCCATTGCTGCCATCACTGTTGCTGCCACTGAA
CCTGGCAAAGGCTATCTACGACCTGAGATCTGCTGGCTCAACTGGGACATGACCAAAGCC
CTCCTGGCCTTCGTGATCCCAGCTTTGGCCATCGTGGTAGTAAACCTGATCACAGTCACA
CTGGTGATTGTCAAGACCCAGCGAGCTGCCATTGGCAATTCCATGTTCCAGGAAGTGAGA
GCCATTGTGAGAATCAGCAAGAACATCGCCATCCTCACACCACTTCTGGGACTGACCTGG
GGATTTGGAGTAGCCACTGTCATCGATGACAGATCCCTGGCCTTCCACATTATCTTCTCC
CTGCTCAATGCATTCCAGGGTTTCTTCATCCTAGTGTTTGGAACCATCCTGGATCCAAAG
GTA
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Figure 8

Sequence Name:

GW.S.ctg16790-000000.13.0

Figure 8A

```
GTTGDWSSEGCSTEVRPEGTVCCCDHLTFFALLLPTLDQSTVHILTRISQAGCGVSMIFL
AFTIILYAFLRLSRERFKSEDAPKIHVALGGSLFLLNLAFLVNVGSGSKGSDAACWARGA
VFHYFLLCAFTWMGLEAFHLYLLAVRVFNTYFGHYFLKLSLVGWGLPALMVIGTGSANSY
GLYTIRDRENRTSLELCWFREGTTMYALYITVHGYFLITFLFGMVVLALVVWKIFTLSRA
TAVKERGKNRKKVLTLLGLSSLVGVTWGLAIFTPLGLSTVYIFALFNSLQVDFYILIFY
```

Figure 8B

```
GGGACCACTGGAGACTGGTCTTCTGAGGGCTGCTCCACGGAGGTCAGACCTGAGGGGACC
GTGTGCTGCTGTGACCACCTGACCTTTTTCGCCCTGCTCCTGAGACCCACCTTGGACCAG
TCCACGGTGCATATCCTCACACGCATCTCCCAGGCGGGCTGTGGGGTCTCCATGATCTTC
CTGGCCTTCACCATTATTCTTTATGCCTTTCTGAGGCTTTCCCGGGAGAGGTTCAAGTCA
GAAGATGCCCCAAAGATCCACGTGGCCCTGGGTGGCAGCCTGTTCCTCCTGAATCTGGCC
TTCTTGGTCAATGTGGGGAGTGGCTCAAAGGGGTCTGATGCTGCCTGCTGGGCCCGGGGG
GCTGTCTTCCACTACTTCCTGCTCTGTGCCTTCACCTGGATGGGCCTTGAAGCCTTCCAC
CTCTACCTGCTCGCTGTCAGGGTCTTCAACACCTACTTCGGGCACTACTTCCTGAAGCTG
AGCCTGGTGGGCTGGGGCCTGCCCGCCCTGATGGTCATCGGCACTGGGAGTGCCAACAGC
TACGGCCTCTACACCATCCGTGATAGGGAGAACCGCACCTCTCTGGAGCTATGCTGGTTC
CGTGAAGGGACAACCATGTACGCCCTCTATATCACCGTCCACGGCTACTTCCTCATCACC
TTCCTCTTTGGCATGGTGGTCCTGGCCCTGGTGGTCTGGAAGATCTTCACCCTGTCCCGT
GCTACAGCGGTCAAGGAGCGGGGGAAGAACCGGAAGAAGGTGCTCACCCTGCTGGGCCTC
TCGAGCCTGGTGGGTGTGACATGGGGGGTTGGCCATCTTCACCCCGTTGGGCCTCTCCACC
GTCTACATCTTTGCACTTTTCAACTCCTTGCAAGTTGATTTTTACATATTGATCTTCTAT
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Figure 9

Sequence Name:

GW.S.ctg12776-000000.172.0

Figure 9A

NHILDTAAISNWAFIPNKNASSDLLQSVNLFARQLHIHNNSENIVNELFIQTKGFHINHN
TSEKSLNFSMSMNNTTEDILGMVQIPRQELRKLWPNASQAISIAFPTLGAILREAHLQNV
SLPRQVNGLVLSVVLPERLQEIILTFEKINKTRNARAQCVGWHSKKRRWDEKACQMMLDI
RNEVKCRCNYTSVVMSFSILMSSKSMTDKVLDYITCIGLSVSILSLVLCLIIEATVWSRV
VVTEISYMRHVCIVNIAVSLLTANVWFIIGSHFNIKAQDYNMCVAVTFFSHFFYLSLFFW
MLFKALLIIYGILVIFRRMMKSRMMVIGFAIGYGCPLIIAVTTVAITEPEKGYIRPEACW
LNWDNTKALXAFAIPAFVIVAVNLIVVLVVAVNTQRPSIGSSKSQDVVIIMRISKNVAIL
TPLLGLTWGFGIATLIEGTSLTFHIIFALLNAFQFFILLFGTIMDHKV

Figure 9B

AACCACATCCTCGACACAGCAGCCATTTCAAACTGGGCTTTCATTCCCAACAAAAATGCC
AGCTCGGATTTGTTGCAGTCAGTGAATTTGTTTGCCAGACAACTCCACATCCACAATAAT
TCTGAGAACATTGTGAATGAACTCTTCATTCAGACAAAAGGGTTTCACATCAACCATAAT
ACCTCAGAGAAAAGCCTCAATTTCTCCATGAGCATGAACAATACCACAGAAGATATCTTA
GGAATGGTACAGATTCCCAGGCAAGAGCTAAGGAAGCTGTGGCCAAATGCATCCCAAGCC
ATTAGCATAGCTTTCCCAACCTTGGGGGCTATCCTGAGAGAAGCCCACTTGCAAAATGTG
AGTCTTCCCAGACAGGTAAATGGTCTGGTGCTATCAGTGGTTTTACCAGAAAGGTTGCAA
GAAATCATACTCACCTTCGAAAAGATCAATAAAACCCGCAATGCCAGAGCCCAGTGTGTT
GGCTGGCACTCCAAGAAAAGGAGATGGGATGAGAAAGCGTGCCAAATGATGTTGGATATC
AGGAACGAAGTGAAATGCCGCTGTAACTACACCAGTGTGGTGATGTCTTTTTCCATTCTC
ATGTCCTCCAAATCGATGACCGACAAAGTTCTGGACTACATCACCTGCATTGGGCTCAGC
GTCTCAATCCTAAGCTTGGTTCTTTGCCTGATCATTGAAGCCACAGTGTGGTCCCGGGTG
GTTGTGACGGAGATATCATACATGCGTCACGTGTGCATCGTGAATATAGCAGTGTCCCTT
CTGACTGCCAATGTGTGGTTTATCATAGGCTCTCACTTTAACATTAAGGCCCAGGACTAC
AACATGTGTGTTGCAGTGACATTTTTCAGCCACTTTTTCTACCTCTCTCTGTTTTTCTGG
ATGCTCTTCAAAGCATTGCTCATCATTTATGGAATATTGGTCATTTTCCGTAGGATGATG
AAGTCCCGAATGATGGTCATTGGCTTTGCCATTGGCTATGGGTGCCCATTGATCATTGCT
GTCACTACAGTTGCTATCACAGAGCCAGAGAAAGGCTACATAAGACCTGAGGCCTGTTGG
CTTAACTGGGACAATACCAAAGCCCTTTAAGCATTTGCCATCCCGGCGTTCGTCATTGTG
GCTGTAAATCTGATTGTGGTTTTGGTTGTTGCTGTCAACACTCAGAGGCCCTCTATTGGC
AGTTCCAAGTCTCAGGATGTGGTCATAATTATGAGGATCAGCAAAAATGTTGCCATCCTC
ACTCCACTGCTGGGACTGACCTGGGGTTTTGGAATAGCCACTCTCATAGAAGGCACTTCC
TTGACGTTCCATATAATTTTTGCCTTGCTCAATGCTTTCCAGGGTTTTTTCATCCTGCTG
TTTGGAACCATTATGGATCACAAGGTA